

# Weekly Influenza Report Week 6

Report Date: Friday, February 19, 2016

The purpose of this report is to describe the spread and prevalence of influenza-like illness (ILI) in Indiana. It is meant to provide local health departments, hospital administrators, health professionals and residents with a general understanding of the burden of ILI. Data from several surveillance programs are analyzed to produce this report. Data are provisional and may change as additional information is received, reviewed and verified. For questions regarding the data presented in this report, please call the ISDH Surveillance and Investigation Division at 317-233-7125.

#### **WEEKLY OVERVIEW**

| Influenza-like Illness - Week Ending February 13, 2016           |          |  |  |
|--|----------|--|--|
| ILI Geographic Distribution                                      | Regional |  |  |
| ILI Activity Code  | Minimal  |  |  |
| Percent of ILI reported by sentinel outpatient providers         | 1.40%    |  |  |
| Percent of ILI reported by emergency department chief complaints | 1.73%    |  |  |
| Percent positivity of influenza specimens tested at ISDH         | 40.60%   |  |  |
| Number of influenza-associated deaths                            | 2        |  |  |
| Number of long-term care facility outbreaks                      | 0        |  |  |
| Number of school-wide outbreaks                                  | 2        |  |  |



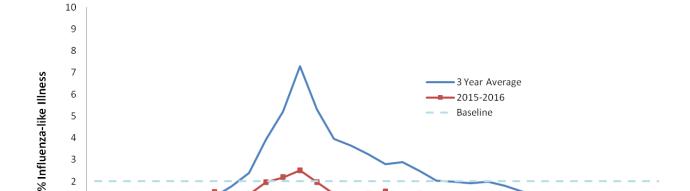
# **SENTINEL SURVEILLANCE SYSTEM**

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Data are obtained from sentinel outpatient providers participating in the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). Data are reported on a weekly basis for the previous Morbidity and Mortality Weekly Report (MMWR) Week by the sentinel sites and are subject to change as sites backreport or update previously submitted weekly data.

| Percent of ILI Reported by Type of Sentinel Outpatient Facility, Indiana, 2015-2016 Season |                        |                       |                           |
|--|------------------------|-----------------------|---------------------------|
| MMWR Week  | All Reporters %ILI (n) | Universities %ILI (n) | Non-Universities %ILI (n) |
| 6  | 1.40% (20)             | 1.41% (6)             | 1.39% (14)                |
| 5  | 1.23 (22)              | 1.52 (8)              | 1.06 (14)                 |
| 4  | 1.52 (26)              | 2.68 (11)             | 0.80 (15)                 |

| Percent of ILI Reported by Age Category in Sentinel Outpatient Facilities, Indiana, 2015-2016 Season |                     |                |  |
|--|---------------------|----------------|--|
| Age Category, years  | Total Number of ILI | Percent of ILI |  |
| 0-4  | 23                  | 39.66%         |  |
| 5-24   | 31                  | 53.45          |  |
| 25-49  | 4                   | 6.90           |  |
| 50-64  | 0                   | 0.00           |  |
| 65+  | 0                   | 0.00           |  |
| Total  | 58                  |                |  |



Percent of Patients with Influenza-like Illness (ILI) in Provider Clinics, Indiana, 2015-2016

40 41 42 43 44 45 46 47 48 49 50 51 52 53 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 MMWR Reporting Week

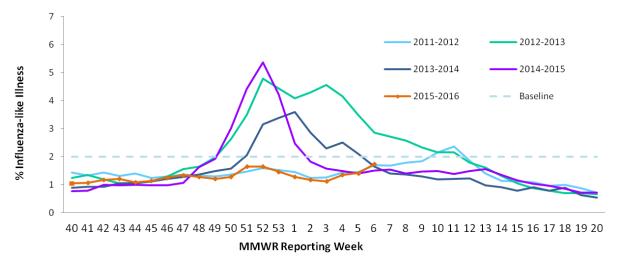


# **SYNDROMIC SURVEILLANCE SYSTEM**

Data are obtained from hospital emergency department chief complaint data through the Indiana Public Health Emergency Surveillance System (PHESS). Data are reported on a weekly basis for the previous Morbidity and Mortality Weekly Report (MMWR) Week and are subject to change as hospitals backreport or update previously submitted weekly data.

| Percent of ILI Reported in Emergency Departments by District, Indiana, 2015-2016 Season |                    |                   |  |
|---|--------------------|-------------------|--|
|   | Previous MMWR Week | Current MMWR Week |  |
| Indiana   | 1.41%              | 1.73%             |  |
| District 1  | 2.38               | 2.42              |  |
| District 2  | 1.42               | 2.41              |  |
| District 3  | 0.56               | 1.15              |  |
| District 4  | 1.55               | 1.92              |  |
| District 5  | 1.08               | 1.20              |  |
| District 6  | 1.74               | 1.99              |  |
| District 7  | 1.42               | 1.58              |  |
| District 8  | 1.00               | 1.08              |  |
| District 9  | 2.00               | 2.64              |  |
| District 10   | 1.30               | 1.55              |  |

### Percent of Patients with Influenza-Like Illness (ILI) Chief Complaint in Emergency Departments, Indiana, 2015-2016





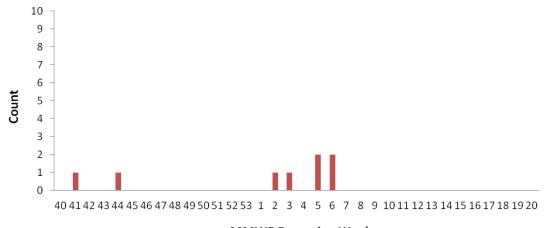
# **INFLUENZA-ASSOCIATED MORTALITY**

Data are obtained from the Indiana National Electronic Disease Surveillance System (I-NEDSS). Influenza-associated deaths are reportable within 72 hours of knowledge; however, not all cases are reported in a timely manner so data in this report as subject to change as additional cases are back-reported.

| Number of Laboratory Confirmed Influenza-Associated Deaths for All Ages, Indiana, 2015-2016 Season |              |  |
|--|--------------|--|
| Age Category, years  | Season Total |  |
| 0-4  | 0            |  |
| 5-24   | 0            |  |
| 25-49  | 0            |  |
| 50-64  | 4            |  |
| 65+  | 4            |  |
| Total  | 8            |  |

| Counties with ≥5 Laboratory Confirmed Influenza-Associated Deaths for All Ages, 2015-2016 Season |              |        |              |
|--|--------------|--------|--------------|
| County   | Season Total | County | Season Total |
|  |              |        |              |
|  |              |        |              |
|  |              |        |              |
|  |              |        |              |
|  |              |        |              |
|  |              |        |              |
|  |              |        |              |

# Number of Reported Influenza-Associated Deaths by Week of Death, All Ages, Indiana, 2015-16





# **VIROLOGIC SURVEILLANCE**

| Circulating Influenza Viruses Detected by ISDH Laboratory*, Indiana, 2015-2016 Season |        |            |              |            |
|---|--------|------------|--------------|------------|
|   | Week 6 |            | Season Total |            |
|   |        | Percent of |              | Percent of |
| PCR Result  | Number | Specimens  | Number       | Specimens  |
|   |        | Received   |              | Received   |
| 2009 A/H1N1pdm virus  | 13     | 40.6%      | 31           | 12.2%      |
| Influenza A/H3 seasonal virus   | 6      | 18.8%      | 40           | 15.8%      |
| Influenza A/H1 seasonal virus   | 0      | 0%         | 0            | 0%         |
| Influenza B seasonal virus  | 0      | 0%         | 3            | 1.2%       |
| Influenza negative  | 13     | 40.6%      | 170          | 66.9%      |
| Inconclusive  | 0      | 0%         | 2            | <1.0%      |
| Unsatisfactory specimen†  | 0      | 0%         | 8            | 3.2%       |
| Influenza Co-infection <sup>△</sup>   | 0      | 0%         | 0            | 0%         |
| Total   | 32     | 100%       | 254          | 100%       |

<sup>\*</sup>Data obtained from the ISDH Laboratory via specimens submitted from the ISDH Sentinel Influenza Surveillance System and IN Sentinel Laboratories.

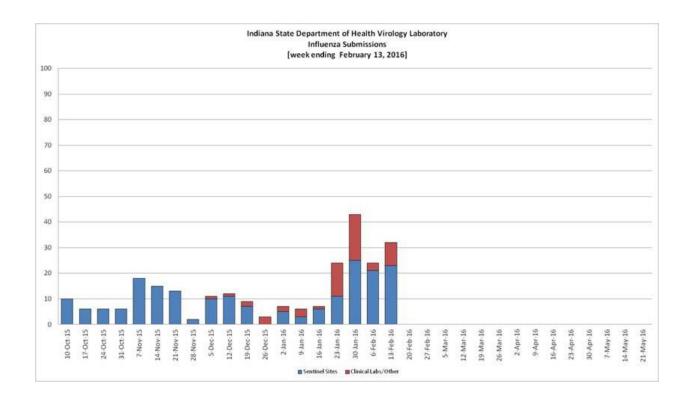
 $<sup>^{\</sup>Delta}$  All previous-year co-infections have been influenza A/H3 and influenza B.

| Circulating Non-Influenza Viruses Detected by the ISDH Laboratory, Indiana, 2015-2016 Season |        |                                 |  |
|--|--------|---------------------------------|--|
| Result   | Week 6 | Season Total<br>(Since 10/1/15) | Early Surveillance<br>(9/1/15 - 9/30/15) |
| Adenovirus   | 1      | 5                               | 0  |
| Coronavirus 229E   | 0      | 0                               | 0  |
| Coronavirus HKU1   | 0      | 0                               | 0  |
| Coronavirus NL63   | 0      | 0                               | 0  |
| Coronavirus OC43   | 0      | 0                               | 0  |
| Enterovirus NOS  | 0      | 0                               | 0  |
| Enterovirus/Rhinovirus   | 0      | 2                               | 1  |
| Human Metapneumovirus  | 0      | 0                               | 0  |
| Parainfluenza 1 Virus  | 0      | 1                               | 1  |
| Parainfluenza 2 Virus  | 0      | 1                               | 0  |
| Parainfluenza 3 Virus  | 0      | 1                               | 0  |
| Parainfluenza 4 Virus  | 0      | 1                               | 0  |
| Rhinovirus   | 0      | 0                               | 0  |
| Respiratory Syncytial Virus  | 1      | 1                               | 0  |
| Total  | 2      | 12                              | 2  |

<sup>†</sup>Unsatisfactory specimens include specimens that leaked in transit, were too long in transit, or were inappropriately labeled.



# **VIROLOGIC SURVEILLANCE (GRAPH)**





#### **FLU REVIEW**

#### **Flu Vaccine Resources**

- The next Advisory Committee on Immunization Practices (ACIP) meeting will be held on February 24, 2016. The scheduled agenda is currently posted on the <u>ACIP meeting page</u>, and the live meeting recording, minutes, and presentation slides will be made available after the meeting. To listen to the meeting live, access the <u>call-in information</u> (registration not required).
- February is <u>Heart Month</u>, which serves as a reminder that heart disease increases the risk of influenza complications. In the 2014-15 flu season, half of adults hospitalized with influenza had heart disease. Receiving the flu vaccine is especially important for anyone with heart disease, and in case of illness, rapid antiviral treatment without waiting for testing should also be administered to patients with heart disease due to their high risk of influenza complications. For more information, visit the <u>Flu and Heart Disease & Stroke</u> page, or view all groups at <u>High Risk of Developing Flu-Related Complications</u> (CDC).
- The CDC has posted a ten-question <u>Influenza Antiviral Quiz for Clinicians</u> to help healthcare professionals learn about the recommended use of antiviral medications during the 2015–16 influenza season. For more about the importance of rapid antiviral treatment, view the Health Alert Network <u>Influenza Health Advisory</u> and commentary reviewing the <u>CDC 2015-16 Influenza Antiviral Recommendations</u> (CDC, Medscape).

#### Flu News and Related Studies

- Influenza activity in the United States continues to increase, with influenza reports remaining above
  the national baseline. Seven states have reported widespread flu activity, seventeen states
  (including Indiana) have reported regional flu activity, and sixteen states have reported local
  influenza activity. View the map of weekly influenza activity in the U.S. and the latest <u>FluView report</u>
  for more about current influenza activity, trends, and impact throughout the United States (CDC).
- In the February 12 MMWR, the CDC reported on <u>Influenza-Related Hospitalizations and Poverty Levels</u> <u>United States</u>, <u>2010–2012</u>, finding that census tracts in which over twenty percent of residents are below the federal poverty level experienced double the rate of influenza hospitalization compared to those in which less than five percent of residents are below the poverty level. This relationship persisted across all age and racial/ethnic groups.
- For pregnant women with influenza, early antiviral treatment is significantly associated with shorter hospital stays, after adjusting for underlying medical conditions, vaccination status, and pregnancy trimester (The Journal of Infectious Diseases).

#### For Further Information, Visit:

www.in.gov/isdh/25462.htm www.cdc.gov/flu www.flu.gov